


		NTSB ID: DEN02LA029		Aircraft Registration Number: N434QS	
		Occurrence Date: 02/08/2002		Most Critical Injury: Serious	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place Broomfield	State CO	Zip Code 80021	Local Time 1126	Time Zone MST	
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer Gulfstream Aerospace		Model/Series G-IV		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
<p>Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:</p> <p>On February 8, 2002, at 1126 mountain standard time, N434QS, a Gulfstream Aerospace G-IV, operated by Executive Jet International of Bluffton, South Carolina, was not damaged when it encountered turbulence while descending en route to BJC, Jefferson County Airport (Jeffco), Broomfield, Colorado. There were no injuries to the airline transport captain and first officer and one passenger, but the flight attendant did sustain a serious injury. Visual meteorological conditions prevailed, and an IFR flight plan had been filed for the corporate flight being conducted under Title 14 CFR Part 91. The flight originated at San Jose, California, at 0825 Pacific standard time.</p> <p>According to Federal Aviation Administration documents, the Denver Air Route Traffic Control Center (ARTCC) advised the flight crew of possible severe turbulence over TOMSN intersection at Flight Level (FL) 190 (TOMSN intersection is located approximately 31 nautical miles north-northwest of Jeffco Airport). According to the captain's written statement, as the airplane descended on the TOMSN 3 STAR (Standard Terminal Arrival Route), she checked BJC's ATIS (Automated Terminal Information Service) that advised of moderate turbulence below 10,000 feet msl. She briefed the flight attendant that turbulence was possible at lower altitudes, and that he should be seated and restrained if the "Fasten Seatbelt/No Smoking" sign was to illuminate. As the airplane vacated FL 250, ARTCC advised the crew of possible severe turbulence over TOMSN intersection and to stop its descent at FL 210. The captain turned on the "Fasten Seatbelt/No Smoking" sign. Shortly thereafter, as the airplane passed FL 220, the airplane encountered "severe turbulence" that lasted until the airplane reached about 3,000 feet (above ground level). She heard the flight attendant screaming, but was unable to check him because of more demanding flight duties. The pilot asked ARTCC for priority handling to the airport, and to have emergency equipment standing by. The flight attendant was taken to a local hospital where X-rays revealed he had fractured a bone in his ankle.</p> <p>The flight attendant later told the captain that prior to encountering the turbulence, he had left his seat to retrieve a lint brush from the galley for the passenger. He heard the "Fasten Seatbelt/No Smoking" chime and returned to his seat. The airplane encountered the turbulence before he could fasten his seatbelt and he was thrown about, landing on his ankle.</p>					
FACTUAL REPORT - AVIATION					

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		Occurrence Date: 02/08/2002				
		Occurrence Type: Accident				
Landing Facility/Approach Information						
Airport Name Jeffco		Airport ID: BJC	Airport Elevation Ft. MSL	Runway Used	Runway Length	Runway Width
Runway Surface Type: Unknown						
Runway Surface Condition: Unknown						
Type Instrument Approach: Unknown						
VFR Approach/Landing: Unknown						
Aircraft Information						
Aircraft Manufacturer Gulfstream Aerospace		Model/Series G-IV		Serial Number 1334		
Airworthiness Certificate(s): Transport						
Landing Gear Type: Retractable - Tricycle						
Homebuilt Aircraft? No		Number of Seats: 16		Certified Max Gross Wt. 73200 LBS	Number of Engines: 2	
Engine Type: Turbo Fan		Engine Manufacturer: Rolls-Royce		Model/Series: 611-8 TAY	Rated Power: 13850 LBS	
- Aircraft Inspection Information						
Type of Last Inspection AAIP		Date of Last Inspection 11/2001		Time Since Last Inspection 340 Hours	Airframe Total Time 3329 Hours	
- Emergency Locator Transmitter (ELT) Information						
ELT Installed? Yes		ELT Operated? No		ELT Aided in Locating Accident Site? No		
Owner/Operator Information						
Registered Aircraft Owner Executive Jet International		Street Address 108 Traders Cross Rd., Suite 200				
		City Bluffton		State SC	Zip Code 29910	
Operator of Aircraft Same as Reg'd Aircraft Owner		Street Address Same as Reg'd Aircraft Owner				
		City		State	Zip Code	
Operator Does Business As:				Operator Designator Code:		
- Type of U.S. Certificate(s) Held: None						
Air Carrier Operating Certificate(s):						
Operating Certificate:			Operator Certificate:			
Regulation Flight Conducted Under: Part 91: General Aviation						
Type of Flight Operation Conducted: Executive/Corporate						
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First Pilot Information																																																																																						
Name			City		State	Date of Birth	Age																																																																															
On File			On File		On File	On File	54																																																																															
Sex: F	Seat Occupied: Left		Principal Profession: Civilian Pilot			Certificate Number: On File																																																																																
Certificate(s): Airline Transport																																																																																						
Airplane Rating(s): Multi-engine Land; Single-engine Land																																																																																						
Rotorcraft/Glider/LTA: None																																																																																						
Instrument Rating(s): Airplane																																																																																						
Instructor Rating(s): None																																																																																						
Type Rating/Endorsement for Accident/Incident Aircraft? Yes					Current Biennial Flight Review? 11/2001																																																																																	
Medical Cert.: Class 1		Medical Cert. Status: Valid Medical--w/ waivers/lim.			Date of Last Medical Exam: 10/2001																																																																																	
<table border="1"> <tr> <th rowspan="2">- Flight Time Matrix</th> <th rowspan="2">All A/C</th> <th rowspan="2">This Make and Model</th> <th rowspan="2">Airplane Single Engine</th> <th rowspan="2">Airplane Multi-Engine</th> <th rowspan="2">Night</th> <th colspan="2">Instrument</th> <th rowspan="2">Rotorcraft</th> <th rowspan="2">Glider</th> <th rowspan="2">Lighter Than Air</th> </tr> <tr> <th>Actual</th> <th>Simulated</th> </tr> <tr> <td>Total Time</td> <td>9862</td> <td>3005</td> <td>1080</td> <td>8782</td> <td>998</td> <td>251</td> <td>240</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Pilot In Command(PIC)</td> <td>9498</td> <td>2117</td> <td>903</td> <td>5595</td> <td>620</td> <td>181</td> <td>240</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Instructor</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 90 Days</td> <td>153</td> <td>153</td> <td></td> <td>153</td> <td>41</td> <td>13</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 30 Days</td> <td>60</td> <td>60</td> <td></td> <td>60</td> <td>17</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 24 Hours</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>								- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air	Actual	Simulated	Total Time	9862	3005	1080	8782	998	251	240				Pilot In Command(PIC)	9498	2117	903	5595	620	181	240				Instructor											Last 90 Days	153	153		153	41	13					Last 30 Days	60	60		60	17	2					Last 24 Hours										
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Seatbelt Used? Yes		Shoulder Harness Used? Yes			Toxicology Performed? No		Second Pilot? Yes																																																																															
Flight Plan/Itinerary																																																																																						
Type of Flight Plan Filed: IFR																																																																																						
Departure Point		State		Airport Identifier		Departure Time		Time Zone																																																																														
San Jose		CA		SJC		0825		PST																																																																														
Destination		State		Airport Identifier																																																																																		
Broomfield		CO		BJC																																																																																		
Type of Clearance: IFR																																																																																						
Type of Airspace: Class A																																																																																						
Weather Information																																																																																						
Source of Briefing: Company																																																																																						
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			Occurrence Date: 02/08/2002		
			Occurrence Type: Accident		

Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
DEN	1053	MST	5431 Ft. MSL	21 NM	265 Deg. Mag.
Sky/Lowest Cloud Condition: Scattered			12000 Ft. AGL	Condition of Light: Day	
Lowest Ceiling: Broken			20000 Ft. AGL	Visibility: 10 SM	Altimeter: 29.76 "Hg
Temperature: 11 °C		Dew Point: -16 °C	Wind Direction: 300		Density Altitude: 6382 Ft.
Wind Speed: 8		Gusts:	Weather Conditions at Accident Site: Visual Conditions		
Visibility (RVR): Ft.		Visibility (RVV) SM	Intensity of Precipitation:		
Restrictions to Visibility: None					
Type of Precipitation: None					

Accident Information					
Aircraft Damage: None		Aircraft Fire: None		Aircraft Explosion: None	
Classification: U.S. Registered/U.S. Soil					

- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot				1	1
Second Pilot				1	1
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants		1			1
Other Crew					
Passengers				1	1
- TOTAL ABOARD -		1		3	4
Other Ground					
- GRAND TOTAL -		1		3	4

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Administrative Information		
Investigator-In-Charge (IIC) Arnold W. Scott		
Additional Persons Participating in This Accident/Incident Investigation: James P Clayville Air Safety Inspector- Avionics FAA- Flight Standards District Office 26805 E 68th Ave. Suite 200 Denver, CO 80249		
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